

IN THE CLAIMS:

1. (Currently amended) A method for decreasing primordial germ cell numbers in an avian embryo, the method comprising:
  - (a) immunizing a female bird with an ~~antigen associated with primordial germ cell development~~ immunogen composition comprising an immunogenic epitope of a DAZL polypeptide; and
  - (b) obtaining an egg comprising an embryo from the female bird, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies that bind to the antigen expressed by an avian wherein as a result of immunizing the female bird, the embryo present within the egg wherein endogenous has a decreased number of primordial germ cells numbers in the avian embryo are decreased.
2. (Original) The method according to Claim 1, wherein the female bird is selected from the group consisting of chicken, turkey, duck, quail, and sand hill crane.
3. (Currently amended) The method according to claim [[3]] 2, wherein the female bird is a chicken.
4. (Currently amended) The method according to Claim 1, wherein the ~~antigen immunogen composition further~~ comprises an epitope of a VASA polypeptide selected from the group consisting of ~~SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL~~.
- 5-6. (Canceled)
7. (Currently amended) A method for inhibiting primordial germ cell development in an avian embryo, the method comprising:
  - (a) immunizing a female bird with an ~~antigen associated with primordial germ cell development~~ immunogen composition comprising an immunogenic epitope of a DAZL polypeptide; and
  - (b) obtaining an egg comprising an embryo from the female bird,

whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies that bind to the antigen expressed by an avian embryo present within the egg wherein as a result of immunizing the female bird, development of primordial germ cells in the avian embryo is inhibited.

8. (Currently amended) The method according to Claim 7, wherein the antigen immunogen composition further comprises an immunogenic epitope of a VASA polypeptide selected from the group consisting of SSEA 1, VASA, EMA 1, germ cell less, dead end, nanos, stella, fragilis, and DAZL.
9. (Original) The method according to Claim 7, wherein the female bird is selected from the group consisting of chicken, turkey, duck, quail, and sand hill crane.
10. (Original) The method according to claim 9, wherein the female bird is a chicken.

11-57. (Canceled)

58. (Currently amended) A method for reducing primordial germ cell numbers, inhibiting primordial germ cell development, or both in an avian embryo, the method comprising:
  - (a) providing a female avian selected from the group consisting of a chicken and a turkey; and
  - (b) immunizing the female avian with an antigen associated with primordial germ cells immunogen composition comprising an immunogenic epitope of a DAZL polypeptide, an immunogenic epitope of a VASA polypeptide, or a combination thereof selected from the group consisting of SSEA 1, VASA, EMA 1, germ cell less, dead end, nanos, stella, fragilis, and DAZL, wherein the immunizing results in an egg produced by the female avian comprising an avian embryo sufficiently high concentration of antibodies that bind to the antigen wherein in which endogenous primordial germ cell numbers are decreased, primordial germ cell development is inhibited, or both in an avian embryo present within the egg.

59. (Canceled)

60. (Currently amended) The method of claim [[59]] 58, wherein the immunogen composition antigen associated with primordial germ cells comprises any of SEQ ID NOs: 3, 4, 7, and 8.

61. (Withdrawn) The method of claim 58, wherein the immunizing comprises immunizing the female bird with an immunogen composition comprising is with at least two a first immunogenic epitope of a DAZL polypeptide and a second immunogenic epitope of a VASA polypeptide antigens associated with primordial germ cells selected from the group consisting of SSEA-1, VASA, EMA-1, germ cell-less, dead end, nanos, stella, fragilis, and DAZL.

62-67. (Canceled)

68. (Withdrawn) The method of claim 58, further comprising incubating the avian embryo to hatch.

69. (Currently amended) A method for decreasing primordial germ cells numbers in an avian embryo, the method comprising:

- immunizing a female bird with an amount of an antigen immunogen composition comprising an immunogenic epitope of a polypeptide selected from the group consisting of a DAZL polypeptide, a VASA polypeptide, and combinations thereof associated with primordial germ cell development in an amount sufficient to generate an antibody response against the immunogenic epitope of the DAZL polypeptide, the immunogenic epitope of the VASA polypeptide, or both in the female bird; and
- obtaining an egg comprising an avian embryo from the female bird, whereby an egg produced by the female bird comprises antibodies that bind to the antigen expressed by an avian embryo present within the egg, wherein as a result of the immunizing, endogenous primordial germ cell numbers in the avian embryo are decreased.

70. (Canceled)

71. (Currently amended) The method of claim 69, wherein the antigen immunogen composition comprises an immunogenic epitope of a DAZL polypeptide is DAZL, and wherein the egg comprises antibodies that recognize DAZL in an amount sufficient to bind to DAZL on primordial germ cells of the embryo and decrease the number of primordial germ cells in the embryo.

Please add the following new claims:

72. (New) The method of claim 1, wherein the immunogen composition comprises at least two immunogenic epitopes of a DAZL polypeptides.

73. (New) The method of claim 7, wherein the immunogen composition comprises at least two immunogenic epitopes of a DAZL polypeptide.

74. (New) The method of claim 58, wherein the immunogen composition comprises at least two immunogenic epitopes of a DAZL polypeptide, at least two immunogenic epitopes of a VASA polypeptide, or at least two immunogenic epitopes of both a DAZL polypeptide and a VASA polypeptide.

75. (New) The method of claim 69, wherein the immunogen composition comprises at least two immunogenic epitopes of a DAZL polypeptide, at least two immunogenic epitopes of a VASA polypeptide, or at least two immunogenic epitopes of both a DAZL polypeptide and a VASA polypeptide.